Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-61. (Cancelled)

62. (Currently amended) A method for treating Tumor Necrosis Factor-alpha (TNFα) mediated immune reaction that causes corneal transplant rejection in a patient, comprising topically administering directly to the eye of said patient an effective amount of anti-TNFα $F(ab')_2$ neutralizing antibody fragments.

63. (Previously presented) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are polyclonal.

64. (Previously presented) The method of claim 63, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are free of albumin, whole antibodies, pyrogens, and/or viruses.

65. (Currently amended) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in combination with a dermatologically or ~~ophatalmically~~ opthalmically acceptable carrier.

66. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered within 24 hours following a corneal transplant in said patient.

67. (New) The method of claim 66, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered within 2 hours following a corneal transplant in said patient.

68. (New) The method of claim 67, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered within 30 minutes following a corneal transplant in said patient.

69. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered at least 3 times a day for about 8 weeks.

70. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered about every 10 to 12 hours for about 8 weeks.

71. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in an ophthalmic suspension or ointment.

72. (New) The method of claim 71, wherein said ophthalmic suspension or ointment comprises about 20 mg/ml to about 30 mg/ml of said anti-TNFα $F(ab')_2$ neutralizing antibody fragments.

73. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in a composition comprising:

(i) about 20 mg/ml to about 30 mg/ml of anti-TNFα $F(ab')_2$ neutralizing antibody fragments;

(ii) about 0.01% to about 1% by weight of an anesthetic agent and dermatologically acceptable excipients;

(iii) about 1% to about 40% by weight urea; and

(iv) about 0.01% to about 1% by weight of calcium acetate, ammonium sulfate, or a mixture thereof.

74. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in a composition comprising:

(i) about 20 mg/ml to about 30 mg/ml of anti-TNFα $F(ab')_2$ neutralizing antibody fragments; and

(ii) a penetration-enhancing system consisting essentially of:

(a) a membrane fluidizer comprising oleic acid;

(b) a C_1-C_4 alcohol; and

(c) a glycol having a pH between 4 and 8.

75. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in a composition comprising:

(i) about 20 mg/ml to about 30 mg/ml of anti-TNFα $F(ab')_2$ neutralizing antibody fragments;

(ii) about 1% by weight laureth-4;

(iii) about 2% by weight propylene glycol;

(iv) about 0.5% by weight dimethylsorbide; and

(v) a pharmaceutically acceptable diluent comprising a mixture of water and ethanol.

76. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in a dermatologically acceptable gel vehicle comprising about 0.01% to about 50% by weight of anti-TNFα $F(ab')_2$ neutralizing antibody fragments.

77. (New) The method of claim 62, wherein said anti-TNFα $F(ab')_2$ neutralizing antibody fragments are administered in a dermatologically acceptable semi-solid vehicle comprising about 0.01% to about 50% by weight of anti-TNFα $F(ab')_2$ neutralizing antibody fragments.